

## REMARKS

### **Status of Claims:**

Claims 1-22 are pending.

Claims 1, 2, 5-10, 13-16 and 19-22 were rejected.

Claims 3-4, 11-12 and 17-18 were indicated as allowable but they were objected to.

Reconsideration and allowance of claims 1, 2, 5-10, 13-16 and 19-22 is requested.

### **Claims Allowable but Objected to:**

The examiner indicated that claims 3-4, 11-12 and 17-18 were allowable; however, these claims were "objected to" since they are dependent upon rejected claims.

Applicant respectfully requests that this objection be held in abeyance until, final disposition of the parent claims.

### **CLAIM REJECTIONS – 35 USC § 103(a):**

Claims 1, 2, 5-10, 13-16 and 19-22 were rejected under 35 USC 103(a) as being unpatentable over the Admitted Prior Art in Fig. 2 in view of U.S. Pat. No. 5,566,170 to Bakke (hereinafter Bakke).

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 2, 5-10, 13-16 and 19-22 as unpatentable over the Admitted Prior Art (APA) in view of Bakke for the following reasons:

The rejected claims are directed to a technique for facilitating routing table lookup. Conventionally routing table lookup operations examine both (a) information in a packet header and (b) information that is a stored routing table. Information from these two sources is to determine a packet's routing. As a packet moves through a network, multiple processors may perform routing table lookup operations.

The method (or system) specified by claims 1, 2, 5-10, 13-16 and 19-22 includes two processors that perform routing table lookup operations. The first routing table lookup operation is a conventional routing table lookup operation that is performed by a first processor. **The second routing table lookup operation is performed using a special and unique technique that is not taught or suggested in the prior art.**

The method (or system) specified by claims 1, 2, 5-10, 13-16 and 19-22 facilitates the second routing table lookup operation, by having the first processor perform a routing table lookup and then pass both (a) the received packet and (b) an identifier tag that the second processor can use to find routing information without performing a routing table search. That is, the identifier indicates the location of the appropriate information in the routing table and the second processor utilizes the identifier tag to locate information in a routing table without performing the normal type of routing table search operation.

The language of claim 1 will now be used as an example to show how applicant's method (or system) is defined in the claims. However, it is noted that while following quotation is from claim 1, the other rejected claims have similar language. The method defined in claim 1 includes the following steps:

- a) "using a first processor ... to perform a routing table lookup for a received packet;"
- b) "determining, from ... the routing table lookup, a routing table identifier...;"
- c) "passing the identifier and the received packet to the second processor; ..."
- d) "the second processor retrieving routing information ..... from a routing table, using the identifier...".

The examiner acknowledges that the Admitted prior Art (APA) "does not expressly teach a second processor responsible for processing and forwarding the received packet: (page 3 of the office action).

The examiner goes on to state:

"One skilled in the art would recognize the advantage of having a second processor for processing and forwarding the received packet so that the NAS can better handle large numbers of input streams, large numbers of output destination and lines, etc."

Even if the above quoted speculation by the examiner were true, the examiner's speculation does not address the issue of how the second processor would perform a routing table lookup operation. Normally as packets pass through a network, they encounter a series of processors, each of which does a normal type of routing table

lookup operation. In the system (or method) defined in applicant's claims, the two processors that serially handle a packet do not each perform a normal routing table lookup operation. Instead, the first processor appends an identifier tag to the processor that identifies the location of the relevant routing information in the routing table. The second processor utilized this tag to find the routing information without doing a routing table lookup search operation.

As noted by the examiner, the Bakke reference shows a first and a second processor that cooperate in order to process a packet. However, there is no indication in the Bakke reference that both of the processors access a routing table to obtain information and there certainly is no information in the Bakke reference concerning any technique to shorten the time required by the second processor to find routing information as recited in applicant's claims. Furthermore, there is absolutely no suggestion that the first processor shown in the Bakke reference provides an identifier to the second processor so that the second processor can locate information in a routing table without doing a routing table lookup operation.

In conclusion, neither the APA of the Bakke reference teaches the step that is recited in claim 1 as:

“the second processor retrieving routing information for the received packet from a routing table, **using the identifier** *(that was added by the first processor)* **to determine the location of the routing information in the routing table**” (emphasis and parenthetical comment added).

Applicant's claims specifically call for using an identifier that is determined by a first routing table lookup operation, to facilitate finding information in a routing table by a second processor. There is no suggestion of any such method (or system) in either the APA or in the Bakke reference.

The above discussion applies equally to each of applicant's independent claims 1, 9, 14 and 15. The dependent claims 2, 5-8, 10, 13, 14, 16 and 19-22 are patentable for the same reasons as discussed above relative to the independent claims upon which they are dependent.

**CONCLUSION:**

For the above reasons, reconsideration and withdrawal of the rejection of claims 1, 2, 5-10, 13-16 and 19-22 under 35 USC 103(a) and allowance of claims 1-22 is respectfully requested.

The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

**Customer No. 20575**

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Elmer Galbi', written over a horizontal line.

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